In the Claims:

1.   (Currently amended) A method for ~~activation~~ managing a transmitter, ~~which method is dynamically adaptive to noise mixed with an input data signal,~~ comprising:

defining a reference level time period;

receiving an input signal including noise and possibly a signal of interest;

calculating a reference level as a function of the power of a first portion of the input signal over the reference time period;

calculating power of a portion of the input signal subsequent to the first portion;

comparing the power of the subsequent portion of the input signal with the reference ~~a reference~~ level;

conducting a transmitter activation determination whether said comparison ~~when said comparing~~ satisfies a ~~first~~ transmitter activation condition, the transmitter activation condition determining whether the power of the subsequent portion of the input signal exceeds the reference level thereby indicating the presence of the signal of interest; ~~condition,~~

generating an activation signal for activating the transmitter when the transmitter activation condition is satisfied to transmit the signal of interest;

conducting a reference level adjustment determination whether the comparison ~~when said comparing~~ satisfies a ~~second~~ reference level adjustment condition, the reference level adjustment condition testing whether there is a lack of a transition between the presence of the signal of interest in the input signal and the absence of the signal of interest in the input signal for a predetermined time period; and ~~condition,~~

adjusting ~~setting~~ the reference level ~~a predetermined amount higher than the calculated power~~ when said reference level adjustment condition is satisfied~~; and~~

~~repeating said steps for each of successive portions of the input data signal~~.

2.   (Canceled)

3.   (Currently amended) The method of claim 2, for a voice activated transmission, further comprising:

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dividing the input signal into a succession of voice signal frames; and

processing the input signal on a frame by frame basis; and

wherein the first condition is that the input signal is at least higher than the reference level to determine the presence of speech.

4.   (Currently amended) A method of managing a transmitter activation, comprising:

defining a reference level time period;

receiving an input signal including noise and possibly a signal of interest;

calculating a reference level as a function of the power of a first portion of the input signal over the reference time period;

defining a reference level adjustment time period;

comparing an input signal with the reference a reference level against the power of for a portion of the input signal subsequent to the first portion;

when said comparing satisfies a condition, generating an activation signal for controlling activation of the transmitter and then repeating said comparing; and

when said comparing does not satisfy the condition repeatedly and successively for the reference level adjustment time period, changing the reference level to a function of the power of a portion of input signal subsequent to the first portion and then repeating said comparing.

5.   (Currently amended) The method of claim 4, for data transmission, further comprising:

calculating power of the input signal;

said comparing step comparing calculated power with the reference level;

said changing step setting the reference level substantially higher than the calculated power of the subsequent portion; and

activating transmission of the input signal in response to the activation signal.

6.   (Currently amended) The method of claim 5, for voice activated transmission that is dynamically adaptive to a level of noise that is mixed with valid speech in the input signal, said method further comprising:

dividing the input signal into a succession of voice signal frames;

processing the input signal on a frame by frame basis;

said activating transmission being on a frame by frame basis; <u>and</u>

said calculating and comparing steps being repeated in order for each of the voice signal frames;

~~wherein the condition is that the power of the input signal is at least higher than the reference level to determine the presence of speech; and~~

~~said changing step setting the reference level relative to the input signal power.~~

7.   (Currently amended) The method of claim 4, for voice activated speech transmission that is dynamically adaptive to a level of noise mixed with valid speech in the input signal, said method further comprising:

dividing the input signal into a succession of voice signal frames;

processing the input signal <u>with</u> ~~sith~~ a codec on a frame by frame basis;

repeating said comparing in order for each of the voice signal frames;

calculating a level of the input signal for a single current frame prior to each step of comparing; <u>and</u>

~~said comparing step comparing the level of the input signal with the reference level;~~

activating transmission of a frame of the input signal in response to the activation signal~~;~~

~~and~~

~~said changing step setting the reference level as a function of the level of the input signal.~~

8.   (Currently amended) The method according to claim 4, which dynamically adapts to a level of noise that is mixed with a valid signal in the input signal for improving transmission performance by adaptively distinguishing between the valid signal and the noise, said method further comprising ~~the steps of~~:

~~prior to said steps, initializing a time period as the predefined time and~~ initializing the reference level as a threshold between assumed noise and the valid signal;

~~calculating a level of the input signal;~~

wherein said condition includes a test for determining if ~~performing said step of generating when said step of comparing determines that~~ the level of the input signal is substantially higher than the reference level; <u>and</u>

resetting the <u>reference level adjustment</u> time period when said step of comparing determines that the level of the input signal is substantially higher than the reference level, prior to performing said step of repeating;

~~said changing step calculating a new reference level as a function of the signal level.~~

9. (Currently amended) ~~An~~ <u>A system for managing a transmitter</u> ~~activation control~~, comprising:

an input node to provide an input signal;

a reference node to provide a reference signal, <u>the reference signal being a function of the power of a first portion of the input signal</u>;

<u>a transmitter;</u>

a comparator operatively coupled to said nodes <u>and to said transmitter</u> to compare the <u>power of the</u> input signal <u>subsequent to the first portion</u> with the reference signal and to provide <u>an activation</u> control when a compared relation between the input signal and the reference signal satisfies a condition;

a first generator coupled to said comparator and controlled by said comparator to generate an activation signal <u>to said transmitter</u> in response to the <u>activation</u> control; ~~and~~

a timer control coupled to said comparator and determining elapsed time when the control is continuously and repeatedly absent, and in response to the elapsed time exceeding a <u>predetermined time</u> ~~reference~~, outputting a time control; and

a second generator coupled to said timer control, generating the reference signal to said reference node and dynamically changing a level of the reference signal in response to the time control<u>, the changed reference signal being a function of the power of a portion of the input signal subsequent to the first portion</u>.

10. (Canceled)

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11.   (Currently amended) A signal transmission device, including the ~~system~~ activation control of claim 9 ~~10~~, for improvement of transmission quality, further comprising:

a calculator coupled to said input node to determine input signal power for a frame of the input signal; ~~and~~

said comparator comparing the input signal power with the reference level and providing ~~the activation control~~ a control when the input signal level substantially exceeds the reference level; ~~and~~

~~a transmitter transmitting the input signal in response to the control.~~

12.   (Currently amended) A ~~signal transmission device~~ voice activated speech transmitter according to claim 11, further comprising:

each of said calculator, comparator and transmitter operating on a frame by frame basis for successive frames of the input signal.

13.   (Currently amended) A voice activated speech transmitter that is dynamically adaptive to noise mixed with valid speech in an input signal, comprising:

means for receiving an input signal;

means for determining a reference noise power threshold as a function of the power of a first portion of the input signal;

means for providing a succession of activation signals indicating speech by comparing power of corresponding successive frames of an input signal with the reference ~~a reference~~ noise power threshold;

means for transmitting the frames successively in response to successive ones of the activation signals; and

means for dynamically changing the reference noise power threshold when no activation signal is provided for a substantial predefined continuous time period representing a plurality of successive frames, the changed reference noise power threshold being a function of the power of a portion of the input signal subsequent to the first portion.

14.   (Original) A computer readable storage media having computer readable code implementing a method for activation that is dynamically adaptive to a level of noise mixed in the input signal, the code including statements for performing the method of claim 1.

15.   (Original) A computer readable storage media having computer readable code implementing a method for activation that is dynamically adaptive to a level of noise mixed in the input signal, the code including statements for performing the method of claim 2.

16.   (Original) A computer readable storage media having computer readable code implementing a method for voice activated speech transmission that is dynamically adaptive to a level of noise mixed with valid speech in the input signal, the code including statements for performing the method of claim 3.

17.   (Original) A computer readable storage media having computer readable code implementing a method for activation that is dynamically adaptive to a level of noise mixed in the input signal, the code including statements for performing the method of claim 4.

18.   (Original) A computer readable storage media having computer readable code implementing a method for data transmission that is dynamically adaptive to a level of noise mixed with valid data in the input signal, the code including statements for performing the method of claim 5.

19.   (Original) A computer readable storage media having computer readable code implementing a method for voice activated speech transmission that is dynamically adaptive to a level of noise mixed with valid speech in the input signal, the code including statements for performing the method of claim 6.

20.   (Original) A computer readable storage media having computer readable code implementing a method for voice activated speech transmission that is dynamically adaptive to a

level of noise mixed with valid speech in the input signal, the code including statements for performing the method of claim 7.

21.   (Original) A computer readable storage media having computer readable code implementing a method for data transmission that is dynamically adaptive to a level of noise mixed with valid data in the input signal, the code including statements for performing the method of claim 8.